

### Explanation of the 2010 Urban Area to ZIP Code Tabulation Area (ZCTA) Relationship File:

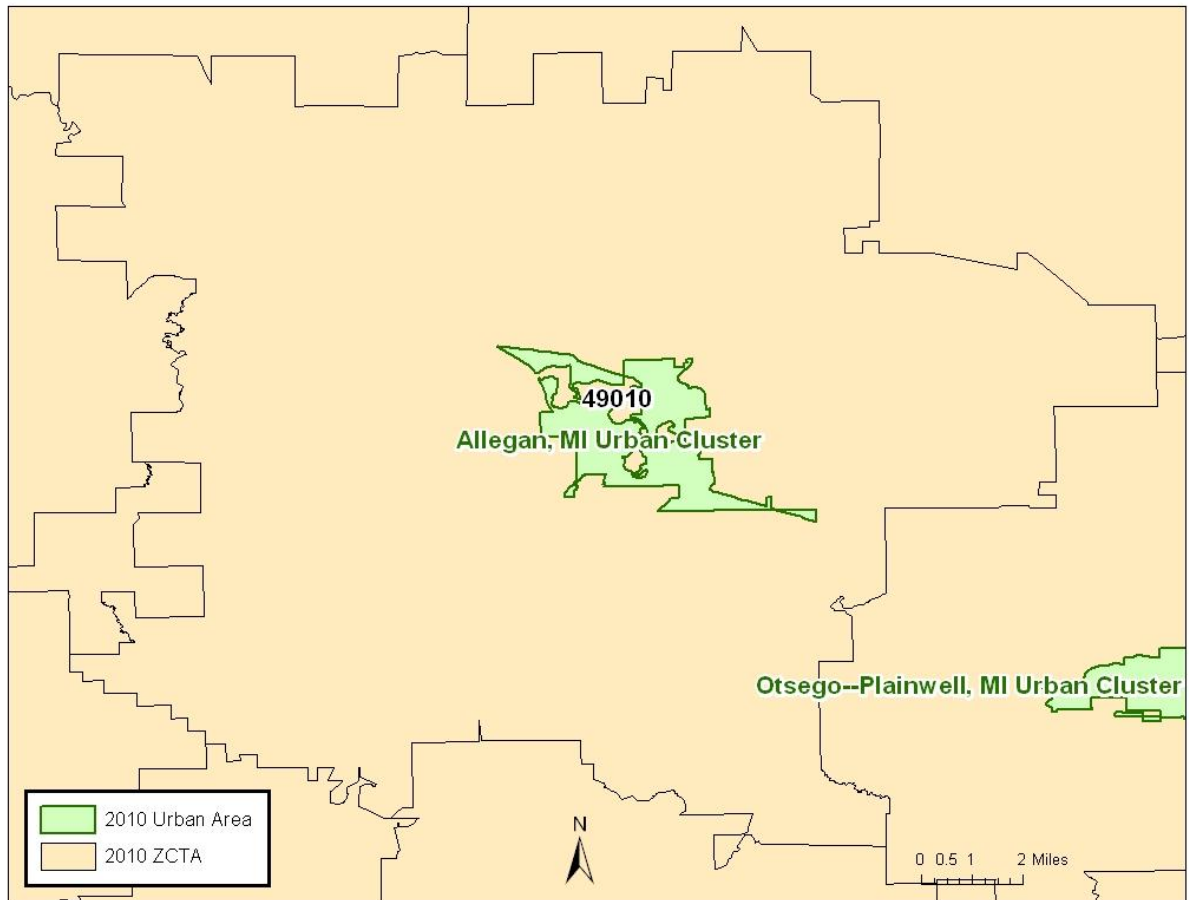
The 2010 Urban Area to ZCTA Relationship File provides relationships between the 2010 urban areas and the 2010 ZCTAs. Urban areas include both urbanized areas (UA) and urban clusters (UC), and areas outside urban areas are considered rural. This list can be utilized to see if a ZCTA is urban, rural, or contains both urban and rural area. Each record in the relationship file represents one polygon that is formed when the 2010 urban areas overlay the ZCTAs. The polygon may represent the intersection of a 2010 urban area and a ZCTA or the portion of the ZCTA that does not contain a 2010 urban area. In addition, since ZCTAs are not a wall-to-wall coverage across the U.S., the polygon may represent the area of a 2010 urban area that does not intersect a ZCTA. It is important to note that all population and housing unit figures given in the file are from the 2010 Census population count.

### Explanation of Urban Area to ZCTA Relationship File: Example 1

This example describes when a ZCTA only contains one urban area and that urban area falls wholly within the ZCTA. In this example, the Allegan, MI UC is in green below and falls wholly within ZCTA 49010, which is outlined in black. There is only one record for the Allegan, MI UC (Value 1). The 2010 population for this relationship record is 6,322 (POPPT) and is equal to the 2010 population of 6,322 for Allegan, MI UC (UAPOP). Likewise, the 2010 housing unit count for both the relationship record (HUPT) and the urban area (UAHU) is 2,821. Therefore, the percentage of the total population of Allegan, MI UC represented by the relationship record (UAPOPPCT) is 100. Although Allegan, MI UC falls entirely within ZCTA 49010, ZCTA 49010 is bigger than the urban area. Since no other urban areas fall within ZCTA 49010, there is only one additional record in the relationship file for the ZCTA. Value 2 represents the area of ZCTA 49010 that falls outside of the Allegan, MI UC and is designated with the name 'Not in a 2010 urban area' (UANAME). The 2010 population living in the portion of ZCTA 49010 outside of any urban area is 11,052 (POPPT) and represents 63.61% of the total population living in ZCTA 49010 (ZPOPPCT). These numbers also represent the rural population in the ZCTA.

Field	Value 1	Value 2
UA	01441	99999
UANAME	Allegan, MI Urban Cluster	Not in a 2010 urban area
ZCTA5	49010	49010
POPPT	6322	11052
HUPT	2821	4939
AREAPT	12368885	416506403
AREALANDPT	12221345	399052727
UAPOP	6322	
UAHU	2821	
UAAREA	12368885	
UAAREALAND	12221345	
ZPOP	17374	17374
ZHU	7760	7760
ZAREA	428875288	428875288
ZAREALAND	411274072	411274072
UAPOPPCT	100	
UAHUPCT	100	

Field	Value 1	Value 2
UAAREAPCT	100	
UAAREALANDPCT	100	
ZPOPPCT	36.39	63.61
ZHUPCT	36.35	63.65
ZAREAPCT	2.88	97.12
ZAREALANDPCT	2.97	97.03

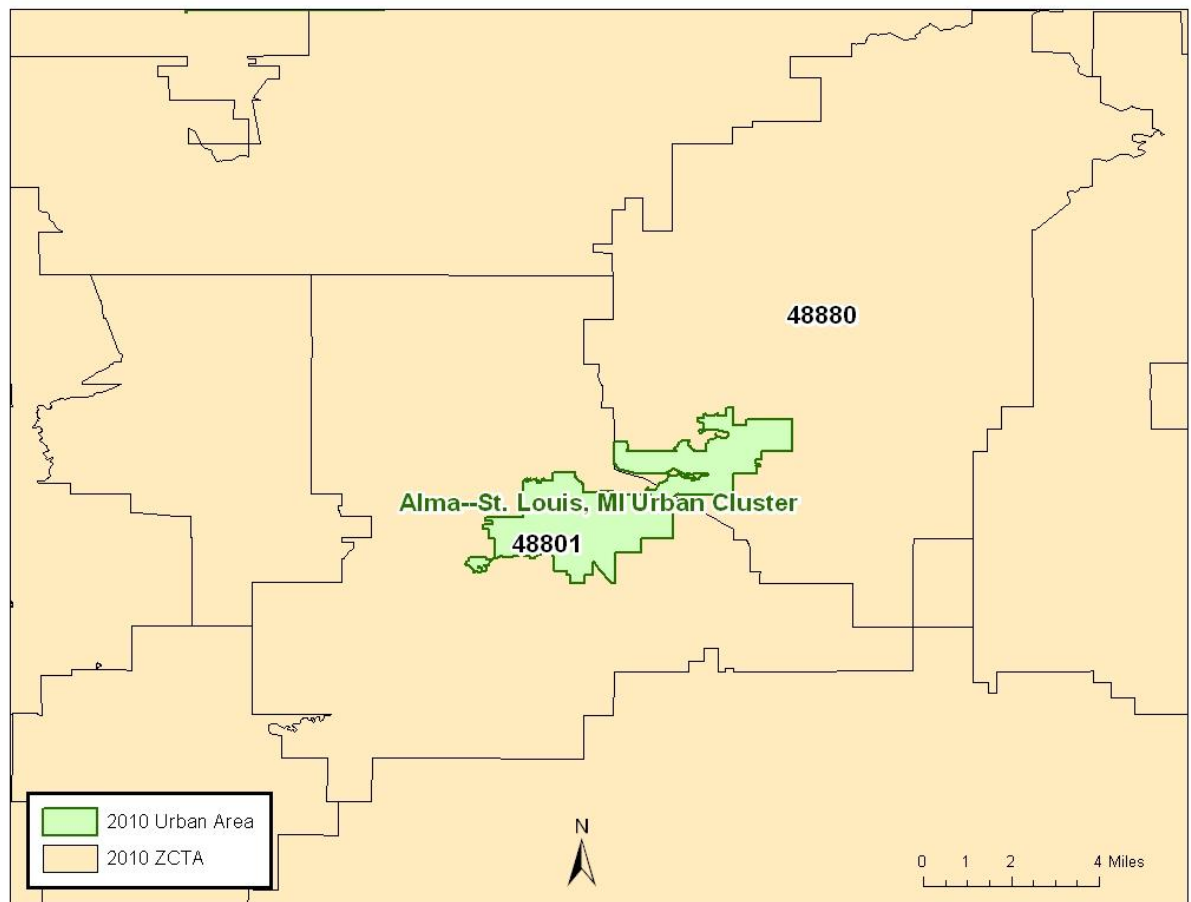


## Explanation of Urban Area to ZCTA Relationship File: Example 2

This example describes when a 2010 urban area falls into more than one ZCTA. In this example, the Alma-St. Louis, MI UC is in green below and falls in two ZCTAs: 48801 and 48880, which are outlined in black. The first record describes the relationship between the Alma-St. Louis, MI UC and ZCTA 48801. The 2010 population living within the Alma-St. Louis, MI UC is 16,924 (UAPOP) but only 9,345 (POPPT) also live within ZCTA 48801. This represents 55.22% of the total population (UAPOPCT) for the Alma-St. Louis, MI UC. Furthermore, out of the total population living within ZCTA 48801, only 72.31% (ZPOPCT) live within the Alma-St. Louis, MI UC. The second record describes the relationship between the Alma-St. Louis, MI UC and ZCTA 48880. The 2010 population living in the Alma-St. Louis, MI UC and in ZCTA 48880 is 7,579 (POPPT) and represents 44.78% (UAPOPCT) of the total population in the Alma-St. Louis, MI UC. Furthermore, 71.04% (ZPOPCT) of the total population in ZCTA 48880 also lives in the Alma-St. Louis, MI UC.

Both ZCTAs 48801 and 48880 contain area outside of a 2010 urban area. Therefore, there are additional records in the relationship file for these ZCTAs that are not shown below.

Field	Value 1	Value 2
UA	01630	01630
UENAME	Alma-St.Louis, MI Urban Cluster	Alma-St.Louis, MI Urban Cluster
ZCTA5	48801	48880
POPPT	9345	7579
HUPT	3777	1700
AREAPT	12283721	7376320
AREALANDPT	12089694	7163402
UAPOP	16924	16924
UAHU	5477	5477
UAAREA	19660041	19660041
UAAREALAND	19253096	19253096
ZPOP	12923	10669
ZHU	5279	2948
ZAREA	186639371	195792904
ZAREALAND	185048302	194344658
UAPOPCT	55.22	44.78
UAHUPCT	68.96	31.04
UAAREAPCT	62.48	37.52
UAAREALANDPCT	62.79	37.21
ZPOPCT	72.31	71.04
ZHUPCT	71.55	57.67
ZAREAPCT	6.58	3.77
ZAREALANDPCT	6.53	3.69



### Explanation of Urban Area to ZCTA Relationship File: Example 3

This example describes when a ZCTA does not contain a 2010 urban area. ZCTA 48614, outlined in black below, does not contain an urbanized area or an urban cluster. Therefore, the record is designated with the name 'Not in a 2010 urban area' (Uaname). The population for the record is 1,376 (POPPT) and is equal to the population of ZCTA 48614 of 1,376 (ZPOP). Furthermore, 100% (ZPOPPCT) of the population living within ZCTA 48614 is considered rural.

Field	Value
UA	99999
Uaname	Not in a 2010 urban area
ZCTA5	48614
POPPT	1376
HUPT	555
AREAPT	92428190
AREALANDPT	91855122
UAPOP	
UAHU	
UAAREA	
UAAREALAND	
ZPOP	1376
ZHU	555
ZAREA	92428190
ZAREALAND	91855122
UAPOPPCT	
UAHUPCT	
UAAREAPCT	
UAAREALANDPCT	
ZPOPPCT	100
ZHUPCT	100
ZAREAPCT	100
ZAREALANDPCT	100

